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EXAMINER

TSOY, ELENA

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/978,524  
Filing Date: October 16, 2001  
Appellant(s): KNAUF, GARY H.

**MAILED**

**JUL 26 2006**

**GROUP 1700**

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Jack M. Cook  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 5, 2006 appealing from the Office action mailed October 28, 2005.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

3,620,872	BACKWELL	11-1971
5,646,231	MARROCCO, III ET AL	7-1997
3,840,421	PETERSON	10-1974
4,963,303	ANDERSON	10-1990

**(9) Grounds of Rejection**

The Examiner Note: IDS filed on October 31, 2005 after Final Rejection has been considered.

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 3-4, 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backwell (US 3,620,872) in view of Marrocco, III et al (US 5,646,231).

Backwell discloses a method for the preparation of a self-supporting assembly comprising: providing a reusable carrier (See column 1, lines 6-16) such as endless carrier or a reel-to-reel carrier web (See column 1, lines 39-40), applying to said carrier a coating of polymeric material by such methods as melt extrusion, aqueous dispersion coating, solvent-based lacquering and hot melt coating (See column 1, lines 47-49), the coating in itself being non self-supporting but being capable of subsequent separation from said carrier when the coating has become part of a self-supporting assembly (See column 1, lines 17-22), applying to the coating of polymeric material an adhesion promotion layer (See column 1, line 21; column 2, lines 9, 45, 69), and applying to the adhesion promotion layer **at least one** further layer of polymeric material by e.g. an extrusion coating (claimed polymer film coating) (See column 1, lines 56-57; column 2, line 10), whereby forming a self-supporting assemble, and subsequently separating said assembly from said carrier (See column 1, lines 22-27). Backwell teaches that the layer or the layers of material to form the finished self-supporting assembly (i.e. both claimed lightweight web and the polymer film coating) may be of such polymers as polyethylene or polypropylene, ethylene-vinyl acetate copolymer or vinylidene chloride copolymers or regenerated cellulose film, paper, board, metal foil or other material to which it is desired to apply a coated finish (See column 1, lines 59-64). The coating of polymeric material may be of ethylene-vinyl acetate copolymer (See column 2, lines 45-47), polyethylene (See column 2, lines 10, 69-70).

The Examiner's Note: *either* the of coating of polymeric material (non- self-supporting web) *or* the coating of polymeric material *with* adhered thereto adhesion promotion layer (a two

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layer laminate may no longer be non-self-supporting web) is lightweight web as claimed because claim 1 does not *exclude* non self-supporting lightweight webs, so that moving the carrier web with the two layer laminate atop the carrier web to the extruder for extrusion coating of at least one further layer of polymeric material could be interpreted as *feeding* a length of lightweight web along with a length of carrier web to an extruder, as required by claim 1 because claim 1 requires neither preformed lightweight webs nor claim 1 *excludes* lightweight webs *formed* on the carrier web. Claim 1 recites nowhere that claimed **feeding** should include a step of laminating a preformed lightweight web onto a carrier web.

However, the Examiner applied Marrocco, III et al to show that it was known in the art to form a layer of a polymeric material on a substrate web either directly on the substrate web or separately from the substrate web and then join the substrate web (Claim 1). Marrocco, III et al teach that coatings may be formed by *any* of the *established techniques*, including but not limited to: coating from melt, solution or latex, or laminating **preformed** films (See column 21, lines 5-9). In other words, Marrocco, III et al teach that laminating preformed films is functionally equivalent to coating from melt, solution or latex.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used preformed coating of polymeric material in Backwell instead of forming the polymeric coating by melt extrusion, aqueous dispersion coating, solvent-based lacquering and hot melt coating since Marrocco, III et al teach that laminating preformed films is functionally equivalent to coating from melt, solution or latex, and the selection of any of these known coating techniques in Backwell would be within the level of ordinary skill in the art.

As to claims 3, 8, and 9, obviously, *any* webs, which could easily break or deform under forces of coating procedures, including those of claims 3, 8, and 9, could be coated using a method of Backwell because Backwell shows how to treat any type of light webs without breakage or deformation, and Backwell does not limit his teaching to a particular weight or material of the web.

As to claims 10, and 11, it is the Examiner's position that any web including lightweight web and heavyweight web can be used as long as they are capable of supporting a lightweight material that would require a support to be treated without deformation.

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Claims 1-4, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (US 3,840,421) in view of Backwell, further in view of Marrocco, III et al.

Peterson discloses a method for registration web processing (See column 1, lines 4-6) comprising applying an adhesive to a carrier belt 12 such as stainless steel (claimed metal foil) (See column 3, lines 10-11, 25-36), pressing a web 44 of stretchable vinyl material (See column 3, lines 49-61), which is difficult to treat without support, (See column 1, lines 18-25) into contact with the adhesive to insure a quick adhesion of the web 44 to the belt and to prevent slippage of the web 44 on the belt 12 (See column 5, lines 49-63), printing the web 44 with various colors (See column 4, lines 3-29, 53-59), applying a sheet of protective clear vinyl material 72 (claimed polymer film coating of claim 2) to the web 44 (See column 4, lines 59-65), and stripping the completed web 44 from the carrier belt 12 (See column 5, lines 23-63). The web 44 has a width which is narrower than the total width of belt 12 (See column 3, lines 62-65). Peterson teaches that the protective clear vinyl material 72 is sealed to the web 44 (See column 4, lines 63-65).

The Examiner Note: obviously stretchable vinyl material of light weight would especially benefit from the method of Peterson.

Peterson fails to teach that the protective clear vinyl material 72 is added to the web 44 by extrusion coating (Claim 1).

Marrocco, III et al teach that coatings may be formed either by laminating *preformed* films or right on a substrate from e.g. melt, solution or latex, powder (See column 21, lines 5-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a coating of protective clear vinyl material 72 right on printed vinyl layer in Peterson from e.g. melt, solution or latex, powder instead of laminating preformed sheet of protective clear vinyl material since Marrocco, III et al teach that coatings may be formed either right on a substrate from melt, solution or latex or by laminating *preformed* films.

Backwell teaches that a coating of vinyl material may be formed right on a printed vinyl material by extrusion (See examples 1-4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used extrusion coating to apply a coating of vinyl material to a web 44 in Peterson in view of Marrocco, III et al in view of Backwell teaches that a coating of vinyl material may be formed right on a printed vinyl material by extrusion.

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As to claim 2, Peterson fails to teach that the width of the *protective* clear vinyl material 72 is wider than the width of the web 44 to be protected, as required by amendment.

However, one of ordinary skill in the art would easily recognize that the protective clear vinyl material 72 should be wider than the width of the web 44 to “**protect**” the edges of the web 44.

Therefore, it would be obvious to one of ordinary skill in the art to use a protective clear vinyl material 72 that is wider than a web 44 with the expectation of providing the desired protection of edges of the web 44.

It is the Examiner’s position that the protective clear vinyl material 72 also would help fixing the web 44 to the carrier in addition to the adhesive, as required by amendment.

As to claims 3, 8, 9, it is the Examiner’s position that the method of Backwell in view of Marrocco, III et al can be used for treating *any* lightweight material that would require a support to be treated without deformation, including those of claims 3, 8 and 9.

As to claims 10, and 11, it is the Examiner’s position that any web including lightweight web and heavyweight web can be used as long as they are capable of supporting a lightweight material that would require a support to be treated without deformation.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backwell in view of Manocco, III et al, further in view of Anderson.

Backwell in view of Marrocco, III et al is applied here for the same reasons as above. As was discussed above, Backwell teaches that the layer or the layers of material to form the finished self-supporting assembly (i.e. both claimed lightweight web and the polymer film coating) may be of such polymers as polyethylene or polypropylene, ethylene-vinyl acetate copolymer or vinylidene chloride copolymers or regenerated cellulose film, paper, board, metal foil or other material to which it is desired to apply a coated finish (See column 1, lines 59-64). Backwell/in view of Marrocco, III et al fails to teach that the other material includes nonwoven fabric.

Anderson teaches that metal plate or moving non-woven fabric backing can be used as a suitable support for applying a casting solution in certain applications (See column 3, lines 56-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a non-woven fabric backing as other material to which it is desired to apply a

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coated finish in Backwell/in view of Marrocco, III et al since Anderson teaches that metal plate or moving non-woven fabric backing can be used as a suitable support for applying a casting solution in certain applications.

It is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 65 USPQ 297 (1945). See also In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious); Ryco, Inc. v. Ag-Bag Corp., 857 F.2d 1418, 8 USPQ2d 1323 (Fed. Cir. 1988).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backwell in view of Marrocco, III et al, further in view of Enlow et al (US 6,254,712).

Backwell in view of Marrocco, III et al is applied here for the same reasons as above. Backwell/in view of Marrocco, III et al fails to teach that instead of applying each layer of the at least one layer of polymeric material onto a traveling carrier sheet by extrusion, the least one layer of polymeric material are applied onto the traveling carrier sheet by co-extrusion.

Enlow et al teach that polymeric layers can be applied onto a traveling carrier sheet by co-extrusion instead of applying each layer by extrusion in series (See column 14, lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied at least one layer of polymeric material onto the traveling carrier sheet in Backwell in view of Marrocco, III et al by co-extrusion instead of applying each layer of the at least one layer of polymeric material onto a traveling carrier sheet by extrusion since Enlow et al teach that polymeric layers can be applied onto a traveling carrier sheet by co-extrusion instead of applying each layer by extrusion in series.

#### **(10) Response to Argument**

Applicants' arguments filed June 5, 2006 have been fully considered but they are not persuasive.

(A) Applicants disagree that Marrocco, III et al supports the examiner's conclusion that Marrocco, III et al teach that laminating preformed films is *functionally equivalent* to coating from

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melt, solution or latex since Marrocco, III et al is directed to rigid-rod polymers and blending the polymers with thermoplastic polymers to achieve improved strength properties for high performance composite materials. Sec Col. 1, lines 15-25. In addition, the Examiner overlooked that Marrocco, III et al. teaches that the extruded lightweight web would be adhered over its entire surface area to the carrier web and so the Examiner relied on just one layer of a laminate (the laminate being the extruded layer and the carrier web) to find the claimed lightweight web. Substituting a preformed film for the extruded layer, it would also have to be laminated to the carrier web in Marrocco, III et al. to obtain a structure according to the Marrocco, III et al. teachings, absent Appellant's teaching that the lightweight web is separate from the carrier web.

The Examiner respectfully disagrees with this argument. First of all, *separate* forming of a lightweight web is not required by claim 1, and claim 1 does not *exclude* a lightweight web, which is formed on a carrier web. Claim 1 recites nowhere that claimed **feeding** should include a step of laminating a preformed lightweight web onto a carrier web. Secondly, Manocco, III et al do teach that laminating preformed films is *functionally equivalent* to coating from melt, solution or latex since Marrocco, III et al teach that the same properties would be achieved whether coating is made from preformed films or from melt, solution or latex, i.e. a composition and structure of Marrocco, III et al is irrelevant. One of ordinary skill in the art would have reasonable expectation of success of achieving the *same properties* of a polymeric coating film from *any* composition, including a composition of Backwell, whether it is formed by extrusion or by laminating preformed films. Therefore, the statement of functional equivalency can be overturn only by showing *unexpected results* of using preformed sheets. At Applicants' initiated interview held on December 14, 2005, the Examiner suggested to run experiments comparing preformed sheets with extruded ones.

(A) Applicants argue the Examiner did not directly address the elements of claims 6 and 7 in any of the rejections but, when addressing claim 1, merely cited that Backwell states that some of the layers may include "polyethylene or polypropylene, ethylene-vinyl acetate copolymer or vinylidene chloride copolymers or regenerated cellulose film, paper, board, metal foil or other material to which it is desired to apply a coated finish." Col. 1. 11. 59-64. However, reading deeper into Backwell, it is clear that the paper, board or foil layers referred to were intended to be layers that were laminated on top of the lightweight web, not the lightweight web itself. See col. 2,

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ll. 43-75 and col. 3. lines 11-22. The Examiner has therefore failed to address each and every element of claims 6 and 7.

The Examiner respectfully disagrees with this argument. Backwell teaches that *the layer or the layers* of material to form the finished self-supporting assembly may be of such polymers as polyethylene or polypropylene, ethylene-vinyl acetate copolymer or vinylidene chloride copolymers or regenerated cellulose film, paper, board, metal foil or other material to which it is desired to apply a coated finish (See column 1, lines 59-64). Therefore, Backwell teaches that paper or metal foil could be used for forming *any layer* in the finished self-supporting assembly to which it is desired to apply a coated finish. Backwell teaches nowhere they should be used only together with the non-supporting layer.

At col. 2, ll. 43-75 and col. 3. lines 11-22 cited by the Applicants to show “deeper reading into Backwell”, Backwell shows some Examples of his invention. However, It is held that patents are relevant as prior art for all they contain including **prior art’s broad disclosure**. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. See MPEP 2123.

(B) Applicants state that the Examiner did not address the elements of the claim 8. Rather, the Examiner simply concluded that these very specific limitations were taught because, as previously addressed, the Examiner concluded that “the method of Backwell in view of Marrocco, III et al can be used for treating *any* lightweight material that would require a support to be treated without deformation.” Office Action of February. 25, 2005, Pg.6 (emphasis in original). Appellant believes that this unsupported conclusion falls short of the requirements for establishing a prima facie case of obviousness, as set forth in MPEP 2143. The Examiner cannot simply supplant the requirement to provide objective evidence with unsupported conclusion.

The argument is unconvincing. Backwell does not limit his teaching to web of any particular weight or materials. Backwell teaches that any type web needing support could be treated by his method (See column 1, lines 58-64). Therefore, the Examiner made *reasonable* assumption based on the Backwell. A burden now shifts to Applicants to show that the web of claim 8 could not be treated by cited art.

(C) Applicants state that Peterson appears to be duplicative.

Peterson is not duplicative because Peterson is cited because of teaching of coating width which other references lack.

(D) Applicants state that it appears that the Office attempted to equate the protective clear vinyl with the extrusion coating. However, such an interpretation is unsupported by the art of record. Marrocco does not disclose or suggest substituting an extruded coating for a preformed film of Peterson, any more than it discloses or suggests substituting a preformed film for the extruded coating of Backwell. The same arguments apply.

The Examiner respectfully disagrees with this argument. The same arguments apply as above.

(E) Applicants argue that the Examiner acknowledged that Peterson (and the other art of record) fails to teach that the width of the protective clear vinyl material 72 is wider than the width of the web 44 to be protected, but concluded that it would have been obvious to use a protective clear vinyl material 72 that is wider than a web 44 with the expectation of providing protection of the edges of the web 44. However, this proffered justification is not the reason for Appellant overlapping the coating onto the carrier web and has no basis. The lightweight web and carrier web in the invention are preferred to be "temporarily affixed to one another as this will facilitate initially collecting both finished webs on a single windup stand for later separation using a rewinder. This allows automatic roll changes to be made at the windup stand at or near full line speed. Protecting the edges is off point, and what that has to do with temporarily adhering the lightweight web to the carrier is not explained in the Office Actions. Accordingly, there is no disclosure or suggestion of the invention of claim 2 in the prior art of record.

The argument is unconvincing. It is held that the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972) (discussed below); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991) (discussed below).

The Examiner does not understand why Office Actions should explain that protecting the edges has something to do with temporarily adhering the lightweight web to the carrier. *Protective* top layer should cover the web edges at least by definition of protection.

(F) Applicants state that Peterson adheres the lightweight web to the carrier belt prior to applying the top layer to the lightweight web contrary to the teachings of the invention.

The Examiner respectfully disagrees with this argument. The open-ended “comprising” language in the claim 1 does not exclude additional steps. Also the claim does not recite a negative limitation about the adhesive.

(G) Applicants argue that Anderson is non analogous to Backwell or Marrocco, III et al. or even the present invention.

In response to applicant's argument that Anderson is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Anderson reasonably pertinent to the particular problem with which the applicant was concerned because Anderson as Backwell or Marrocco, III et al. or even the present invention relates to a moving backing that can be used as a suitable support for applying a coating.

(H) Applicants argue that nowhere does Enlow et al. teach or suggest the application of coextruded polymer films onto a lightweight web, which traditionally could not withstand such an extrusion process without deformation, as claimed. Accordingly, Enlow et al. teaches nothing more relevant to the claimed invention to establish that coextrusion of films is known. Rather, as addressed above, the prior art does not teach or suggest the ability to apply an extrusion coating to a lightweight web that is separable from a carrier web on which it resides. In this regard, the additional element of a coextruded, dual- layer, polymer film coating further distinguishes the claimed invention from the art of record. For at least these reason, claim 12 is patentably distinct from the art as applied.

The argument is unconvincing because Enlow et al is a *secondary* reference which is relied upon to show that well established coextrusion technique can be used instead of extrusion of each layer. All other features of claimed invention were shown by other references.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

Elena Tsoy  
Primary Examiner  
Art Unit 1762  
July 21, 2006

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